

Drawings

It is noted that the drawings have been accepted.

Rejection Double Patenting

Claims 1-5, 9-14 and 18-23 are rejected on the grounds of double patenting over *Wilson*, U.S. Patent 5,792,839. It is requested that the rejection on the grounds of double patenting be held in abeyance until allowable subject matter is found in the application. That this request is valid, note particularly that claims 1-5 have now been canceled and other claims have been amended. Note also that *Wilson* does not disclose a continuous process as required by the claims; and in addition *Wilson* does not disclose preparing 1,1,1,3-tetrachloropropane as required by claims 10 and 19.

Rejection Under 35 USC § 102

Claims 1-5, 9-14 and 18-23 stand rejected as being anticipated by *Wilson et al* (U.S. 5,792,893). Claims 1- 5 have now been canceled.

Regarding claims 9 (and dependent claims 10-14) it is not see that claim 9 and dependent claims 10-14 can be rejected over *Wilson* under 35 USC § 102 for the following reasons:

- 1) Claims 9-14 of the instant application are for a continuous process, while the *Wilson* patent is for a batch process. While *Wilson* mentions a continuous process as being possible, there is no enabling disclosure in *Wilson* for a continuous process. All of the examples of *Wilson* (Examples 1-15) are batch reactions.

- 2) Further, regarding claim 9 (and dependent claims 10-14) it is respectfully pointed out that the prior art applied, namely *Wilson*, does not show the method of claim 9 wherein steps e) and f) are shown. That is the steps of “dissolving the solid copper catalyst components from step c) in the recovered co-catalyst stream of step b) to produce a solution of copper catalyst components in a liquid containing the co-catalyst and then continuously as set forth in step f) continuously feeding a portion of the liquid catalyst/co-catalyst solution from step e) back into the reactor.
- 3) Regarding the rejection of claim 14, there is no step in *Wilson* wherein the catalyst recovery unit comprises “a distillation column located above a hydrocyclone unit wherein the solids formed during distillation are continuously swept from the hydrocyclone using a liquid stream taken from the solids/liquid separation unit of step c)”.

Regarding claim 18 (and dependent claims 19-23) as pointed out above, *Wilson* is silent as to the process steps d), g) and h) wherein co-catalyst components are joined and returned to the reactor.

In view of the fact that *Wilson* does not show, as herein above pointed out, all of the steps of the claimed processes, the rejection under 35 USC § 102 is believed to be improper and should be withdrawn; and the same is requested.

Rejection Under 35 USC § 103

Claims 6-8, 15-17 and 24-26 stand rejected as being obvious over *Asscher et al* (U.S. 3,651,019) and *Wilson et al* (U.S. 5,792,893) in combination.

Asscher discloses a process of reacting carbon tetrachloride and an olefine to prepare chlorinated alkane products. For example, carbon tetrachloride is reacted with ethylene to prepare 1,1,1,3-tetrachloropropane and 1,1,1,5-tetrachloropropane. *Asscher* is said by the Examiner to be deficient in not teaching the separation and purification steps of the instant claims; and the Examiner is relying upon *Wilson* to make up the deficiency of *Asscher*. For the reasons which follow *Asscher* cannot be properly combined with *Wilson* to reject claims 6-8, 15-17 and 24-26.

1) The *Wilson* reference teaches only the preparation of 1,1,1,3,3,3-hexachloropropane or 1,1,1,3,3,5,5,5-octachloropentane while *Asscher* teaches the preparation of 1,1,1,3-tetrachloropropane or 1,1,1,5-tetrachloropropane. To combine *Wilson* with *Asscher* would amount to combining non-analogous art. The final products being prepared by *Wilson* and *Asscher* are actually distinct chemical entities.

2) In further rebuttal of the rejection over *Asscher et al* in view of *Wilson et al* it is pointed out that claims 6-8, 15-17 and 24-26 all have specific numeric limitations specifying finite reaction conditions necessary to prepare 1,1,1,3-tetrachloropropane. Note particularly that the instant claims prescribe a pressure of 80-400 psig while *Asscher* has a pressure of 800 to 600 psig. While *Asscher* in examples 1 and 2 prepares 1,1,1,3-tetrachloropropane, *Wilson* does not

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Docket No. 03198-PA
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prepare 1,1,1,3-tetrachloropropane, but prepares non-analogous 1,1,1,3,3,3-hexachloropropane and 1,1,1,3,3,5,5,5-octachloropentane.

3) Finally, note that neither *Asscher* or *Wilson* teach the continuous process steps as set forth in the claims.

In view of the comments set forth above, it is requested that the rejection of claims 6-8, 15-17 and 24-26 over *Asscher and Wilson* be withdrawn.

It appears that all rejections have been satisfactorily addressed, and the Examiner is requested to indicate allowable subject matter in this application.

In the event the Examiner has suggestions as per MPEP 707.07 (d) and (j), for putting the case in condition for allowance, he is respectfully urged to contact the undersigned attorney-of-record at the telephone number below, so that an expeditious resolution may be effected and the case passed to issue.

Sincerely,

May 4, 2005
Date

Sam Rosen
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SR/jjr (05/04/05)

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<p align="center">CERTIFICATE OF TRANSMISSION</p> <p>I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.</p> <p>Date: May 4, 2004</p> <p>Express Mail Label No.: EV 663379348 US</p> <p>By: <u>Judy Robertson</u> Judy Robertson</p>
